ROLE AND IMPACT OF E-LEARNING IN SKILL DEVELOPMENT OF MEDIA STUDENTS: WITH SPECIAL REFERENCE TO UNIVERSITY EDUCATION IN UTTARAKHAND

SYNOPSIS

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Submitted by
Anwesha Sen Majumdar
ID No: IUUPHC950

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Dr. Sushil Kumar Rai
SUPERVISOR

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Chapter 1

INTRODUCTION

Over time, various teaching techniques have been adopted in our country. Gurukulavasams, ashrams and temples were the teaching centres in ancient India. Teachings were mainly carried out through speaking and hearing. The teacher imparted all knowledge the student wanted to gain, from Sanskrit to the scriptures and from mathematics to metaphysics. The student stayed in the ashram for the time period he wished or until the guru felt that he had imparted all knowledge that he could. Learning was closely associated with nature and life, and young students formed close bonds with their teachers.

The education system slowly went through a sea change in the early 19th century. The modern school setup was brought to India, including the commonly prevalent English language, by Lord Macaulay in the 1830s. The curriculum was limited to 'modern' subjects such as science and mathematics, and subjects like philosophy were deemed unnecessary. This promoted a steady stream of Indians who could do clerical jobs for British India. However, the mastery of the English language gave Indians an edge over the Chinese in dominating the world IT & technology sphere.

Then came around the classroom system that incorporated the blackboard-and-chalk setup. This practice is still common in Indian schools and universities. Slowly, the concept of smart classrooms is also being executed, where the use of projector and internet is fast gaining popularity.

Now, with the rise of digital media and rapid digitization, with the ubiquitous use of internet, laptops, android and iPhones and tablets, there is a growing strength of students who are being taught digitally and sometimes not ever leaving the comforts of their home. This concept of learning with the help of the internet and other digital tools is commonly referred to as E-learning. E-teaching methods do not have any confinement for either teacher or students, spurred by the sudden COVID-19 pandemic that forced the lockdown in 2020.

Academicians say E-learning will remove the gap between the skilled and unskilled especially in a country like ours which is yet to hit the 100% literacy mark.

According to the Economic Survey of 2017 published by the Organization for Economic Co-operation and Development (OCED), 30% of Indians between the ages of 15 and 29 are not enrolled in education or any kind of skill training or employment. This shows that the traditional education system is unaffordable and insufficient to meet the growing demands of the

economy, resulting in low enrollment rates. Besides, media and technology-based media organisations are looking for skilled employees and not just manpower, thereby pushing job seekers to develop skills using MOOCs (Massive Open Online Courses) and online certification courses, or simply hobby courses to add a value-added skill to their CV.

The problems of infrastructure, connectivity and internet accessibility are also there. The lifestyle and economic status of villagers also hamper the adoption of E-learning tools. We can use these measures to execute the concept of E-learning in rural areas where there will be many takers.

This surge in demand for digital education has encouraged many E-learning companies and universities in India and abroad to adopt the latest technologies and methods to impart course material to prospective e-learners. This has also led to a growth in E-learning platforms such as BYJUS, Coursera, Unacademy, Masterclass and Upgrad. Even universities like Amity University are offering online courses to upskill students and working professionals to upgrade them in the competitive job market.

Increased proliferation of the internet and smartphones in India is another key factor that is driving growth in the Indian E-learning environment. High internet proliferation has created a big consumer base for E-learning companies in India to acquire and monetize the opportunity. This has led to the rise of E-learning apps with many offering specific courses catering to the needs of the population. India offers notable opportunities for educational content development companies. For example, Bangalore-based BYJU's, an EdTech company, launched its mobile app in 2015 and has since been downloaded by more than 6 million users across the country. Thus, it can be said that the future of E-learning in India is impressive as well as promising for E-learning companies.

Key categories of E-learning:

- Primary & secondary education: Supplement to school learning for kids enrolled in primary and secondary classes. Eg: BYJU’s
- Higher education: Gives a viable alternative to students who are not able to access higher education system. Eg: MOOC
- Test preparation: For professionals and students who want to appear for higher competitive exams. Byjus

- Reskilling and online certification market: Courses designed to help users such as media graduates in skill enhancement which may result in certifications. Eg: Upgrad
- Language and casual learning: Learning skills related to non-academic subjects such as spoken English, French or learning how to do makeup/cooking. E.g. Unacademy

Uttarakhand is the second fastest growing state in the country, with major industries including tourism, information technology and higher education. This state, like all others, has also been affected by the COVID-19 lockdown. With its unique demography and terrain, education in Uttarakhand has been acutely changing with the times.

Uttarakhand, formerly known as Uttaranchal, is a state in the northern part of India. It is often called "Devabhumi" ("Land of the Gods") due to several Hindu temples and pilgrimage centres located throughout the state. Uttarakhand is also known for the natural environment of the Himalayas. The state is divided into two main areas, Garhwal and Kumaon, with a total of 13 districts. The winter capital of Uttarakhand is Dehradun, which is the largest city of the state. As per the 2011 Census of India, Uttarakhand had a population of 10,086,292, making it the 20th most populous state in India.

Uttarakhand had a long culture of learning. Education in this state has been made accessible by various public and private institutions, with Dehradun having the highest figure of state and private centers of higher education. Literacy rate of the state is 79.63% with the ratio being 88.33% for males and 70.70% literacy for females.

Media education in Uttarakhand is gradually gaining traction day-by-day. Universities like IMS Unison University, UPES, Graphic Era and Uttaranchal University are offering both Bachelors and Masters in Journalism, Mass Communication & Multimedia, infact, Dehradun is slowly becoming the preferred city for education for many students who wish to pursue a course in Media Studies.

1.1 Definitions of E-learning

With the ever-evolving E-learning industry, academicians have defined and described E-learning in myriad ways.

E-learning is often described as education via the internet or a digital network that creates an augmented learning environment. E-learning technology is used to deliver a range of teaching techniques aimed at maximizing the student's participation in the learning process. The student can schedule classes and learning activities anytime. Online content can include text, audio, video, simulations, animation, and even VR applications.

E-learning is often described in terms of technology. **Abbad et al. (2009)** defined E-learning as any learning that is done electronically. **Welsh et al. (2003)** defined E-learning as the use of internet and computer technology to make available content and instructions to individuals. **Rosenberg (2001)** shares a similar definition referring to E-learning as using Information & Communication Technology to deliver various solutions to students. **Holmes and Gardner (2006)** said that E-learning provides access to resources that enable learning anywhere and anytime. As per **WR Hambrecht (2000)**, "E-learning covers a wide set of applications and processes including computer-based learning, web-based learning, virtual classroom, and digital collaboration."

Although the definitions of E-learning may differ, most of them emphasize three basic concepts that include **learning, technology, and access.**

The term E-learning is now becoming widely known as a substitute for online and web-based learning. Terms such as web-based instruction are synonymous with E-learning. **Khan (1997)** said that hypermedia-based instructional programs utilize the attributes and resources of the web to create a meaningful learning environment where learning is supported. **French, Hale, Johnson and Farr (1999)** mentioned another synonym of E-learning and opined that partaking the educational process of learning over the Internet without having face-to-face contact is basically Virtual Learning.

However, in common language, Online Learning as a term is heavily used in the mainstream educational industry**. Mishra (2001)** calls it the new generation in the evolutionary growth of open, flexible and distance learning.

E-learning can be divided into two different types. i.e. Synchronous E-learning (real-time interaction between learners and trainers on the internet) and Asynchronous E-learning (the

learners would have the freedom to complete the training at their own speed and without much interaction with the faculty). **Hrastinski (2008)** found that asynchronous E-learning has also become popular and is in fact being preferred over any other type.

The term E-learning actually includes a lot more than online learning, virtual learning, distributed learning and networked or web-based learning. As the letter ‘e’ in E-learning stands for the word ‘electronic’, E-learning makes full use of educational tools and activities that are implemented by academicians, educational experts working both online and offline, synchronously or asynchronously through networked or standalone computers and other electronic and digital devices.

1.2 Research Problem

The education system is in a constant state of innovation, especially in this era of digitization and cutting-edge technology. Knowing the importance of technology and the internet, even the Indian government is putting a lot of emphasis on making Skill India and Digital India an important poll plank. In this scenario, E-learning can be a very effective option for the development of skills.

Currently, India has approximately 504 million active internet users, who are five years or above, according to a study by Internet and Mobile Association of India (IAMAI) and Nielsen. This makes India the world's second-largest internet market after China. But what makes it more irresistible to education-based tech companies and E-learning entrepreneurs is that India also happens to be the largest untapped internet market in the globe. With close to 900 million people without internet connectivity still, there's little doubt that the next billion users are going to come from India.

This brings us to E-learning for India's largest demographic segment, 'India's under 35'. When almost two-thirds of the Internet users in India are in the age group of 12-29 years, it is imperative that educational aspirations of these groups are met with the help of E-learning and innovative technology.

However, only 46% of the students who graduated last year were considered employable. Even though it's a huge increase in the past few years, it is a matter of concern that employability is still not 100% even though India produces one of the highest number of graduates in the world.

One of the reasons for low employability is the lack of basic skills and niche expertise. These statistics show that traditional learning may not always be fruitful for students who want that extra edge during their job hunt; this is where E-learning can play an impactful role in skill development and skill-building.

After an extensive review of literature, the following aspects need to be discussed further: role of E-learning in the skill development of University students, challenges and barriers in the adoption of E-learning in a developing country with high digital divide like India with different demographics in every state like Uttarakhand, the role of E-learning in Uttarakhand which being a hill state has a different demographic than other states in India, how has E-learning helped in skill development of Media students in the state of Uttarakhand especially after the sudden change in education system after COVID 19 pandemic.

1.3 Research Questions

Keep the above research problems in mind, the research study has specified the following questions to find the required answers.

1. What is the role of E-learning in skill development of media students pursuing university education in Uttarakhand?
2. What are the key driving factors in the adoption of E-learning in skill development of media students pursuing university education in Uttarakhand?
3. How has COVID-19 pandemic affected the adoption of E-learning among media students pursuing university education in Uttarakhand?
4. What are the main barriers of E-learning among media students pursuing university education in Uttarakhand?
5. What is the impact of E-learning on skill development of media students pursuing university education in Uttarakhand?

1.4 Importance and need of the study

The Indian government is pushing towards Skill India and Digital India with utmost urgency. This is because we as a global village are becoming more and more technologically reliant, innovative and interconnected. Education too has seen a dynamic change, especially after the COVID 19 pandemic. From nurseries to universities, education in all spheres has been forced to go online. Classes are being now undertaken on Zoom or Google Meet. This has truly shown the power of technology and innovation in times of crisis.

However, with the sudden implementation of E-learning due to the multiple lockdowns enforced in India, there has been a stark change in the way the education industry functions. With India being a developing country, rising internet users but having a diverse demographics and climate, it has become even more important to study the role and impact of E-learning on the skill development of students.

The students have immensely benefited from these remarkable technology innovations. They now have access to a variety of courses which they might not in a traditional educational setup. The COVID 19 pandemic has also forced everyone to continue their studies online, giving them time at home to skill and upgrade themselves, with new and niche expertise. Education has truly become a global village.

Uttarakhand is a new state with a different demographics than the rest of the country. Negligible studies have been conducted with special reference to university education of media students. Students and graduates will have different opportunities and have different skill sets than other states. Therefore, this study will help the researcher understand how media students pursuing university courses can benefit from an online course, especially when such subjects are practical intensive, in a digital age.

E-learning is poised to be the future of education. Hence, this study will also be of valued importance to policy makers from not only Uttarakhand, but other states as well. The data can be appropriately used to formulate strategies and programs that will benefit the education ecosystem in near digital future.

1.5 Aim and Objectives of the Study

The aim of the research study is to examine and analyze the role and impact of E-learning on Skill Development of Media students, with special reference to University education in the state of Uttarakhand. The overall aim is further specified by the following research objectives.

Research Objectives of the Study

1. To study the role of E-learning in skill development of media students, with reference to University education
2. To study the key driving factors facilitating E-learning of media students, with reference to University education
3. To study the role of Covid-19 pandemic in adoption of E-learning by media students, with reference to University education
4. To explore the barriers in E-learning among Media students, with reference to University education
5. To study the impact of E-learning on skill development of Media students, with reference to University education

1.6 Hypotheses

Based on the identified objectives and research questions, the following research hypotheses are proposed:

H_0 1: There is no significant relationship between E-learning and skill development of media students.

H_1 1: There is a significant relationship between E-learning and skill development of media students.

H_0 2: There is no significant relationship between Covid-19 pandemic and adoption of E-learning by media students.

H_1 2: There is a significant relationship between Covid-19 pandemic and adoption of E-learning by media students.

H_0 3: There is no significant impact of E-learning on skill development of media students.

H_1 3: There is a significant impact of E-learning on skill development of media students.

Chapter 2
REVIEW OF LITERATURE

Digital technologies are changing practices of teaching and learning at educational institutions around the world. Teachers and teaching institutions are making a lot of efforts towards E-learning development and towards improving IT infrastructure keeping in mind high return on investment **(Nanayakkara, 2007).**

2.1 E-learning: Growth and Development

E-learning is catching up in tertiary education, with universities giving impetus to this medium and more students registering for it**. (OECD, 2005).**

A lot of growth has been reported in the domain of E-learning in countries such as Malaysia **(Ali, nd),** United States **(Edelson and Pittman, 2001),** Korea **(Park, 2012), and** Denmark **(Rytkønen and Rasmussen, 2010).** In Denmark, UC/LIFE is said to be one of the leading universities in E-learning**(Rytkønen and Rasmussen, 2010).**

Western countries have made a lot of effort towards the development and implementation of E-learning programmes. Due to learning environments that are dynamic and competitive, many western educational institutions have spent a lot of resources to grow their E-learning system **(Ling and Moi, 2007).** The pivotal role that E-learning performs in accessing, collecting, analyzing and transferring of information and knowledge **(Bates 2005),** the vital strategic planning and contribution towards progress of the academic staff and students, and careful improvements in the quality of teaching techniques and learning management systems **(Begiievic et al. 2007),** have led to an increase in the popularity of E-learning in different educational institutions, making the domain of E-learning one of the fastest growing markets in North America **(Sulˇciˇc, 2007).** In Northern Ireland, the University of Ulster is the best in the region with respect to development and delivery of E-learning. 25% of all post-graduate students at this institution access information through E-learning. **(Uhomoibhi, 2006).**

Another example is of the famous Queen's University in Belfast, Northern Ireland, which has taken a blended approach to E-learning, combining E-learning with traditional media and methods in line with course curriculum, level and students **(Uhomoibhi, 2006).** In Canada, E-learning

proved to be more effective in distance education, where use of technology is required more than in face-to-face teaching settings **(Abrami, Bernard and Wade, 2006).**

A study by the **British Journal of Educational Technology (2014)** concluded that E-learning is now being adopted more-and-more in workplaces to help professional development and continue education; however, in higher education, the use of E-learning is mainly used as tool support teaching.

The continuous demand to cut costs by lowering the number of the hired academic staff, and the huge amount of efforts that are being shown by universities to increase enrollment rates by offering flexible schedules that suit different students, have also increased the need for universities to embrace the concept of E-learning**(Zapalska et al, 2003).**

Shurville and Browne (2006) said there are many reasons for educational institutions to adopt E-learning systems such as personalizing learning, facing global competition. supporting lifelong and work-based learners, addressing environmental sustainability and reducing costs. One of the main issues is the difficulty of integrating these systems with content and other business systems. If E-learning is to be implemented successfully, educationists, academicians, and E-learning entrepreneurs should give greater access to education and support educational programs that go in line with the broader learning and business goals.

2.2 E-learning: Benefits

The huge growth in information technology has transformed the process of teaching and learning. The key advantages of E-learning are accessibility, flexibility, and convenience. Learners can go through an E-learning program at their own convenience. Learning can take place at any time and at any place, as long as a computer system with internet access is available**. Huang (2010)**, **Obringer, L.A (2001) and Obringer (2009)** concluded that E-learning provides notable opportunities and benefits to learners, is easy and inexpensive to execute, can function from any location and any time and lead to more retention and grasp on the subject.

The use of online technology in higher studies will lead to the end of inflexible and inaccessible learning techniques. **O'Donoghue et al. (2001)**concluded that E-learning negates the constraints of time and place and information will be assimilated at the student's convenience and assignments will be handed online. There is also a benefit for everyone involved, from reducing building resource costs to the availability of teaching support 24 hours a day, 7 days a week making it better for students.

McClelland (2001) said that E-learning provides continuous learning support as students browse websites and go through course material incessantly. His study concludes that in an E-learning environment, teachers can offer regular educational support, as students are able to talk to classmates and lecturers, visit websites and look at course material regardless of their location or time. **Ahmad (2013)** said in his research that the learning of students using E-learning became better, as it invigorated their interest in lessons because course material is provided in different forms. The students also liked the platform as they felt they were an important contributor in that institution.

The performance of students who were able to access E-learning was also studied. **Holley (2002)** said that students in online learning got better grades than students who belonged to traditional learning environments. Students were quite appreciative about the course and the efforts that were made to get them engaged in different types of learning. **Hartley (2000)** opined that E-learning helps learners to become lifelong learners irrespective of their age, profession or location. E-learning is also aided by the reasoning that there are times when using technology remains the only way to complete a task, such as acquiring money from an ATM or placing an order online.

E-learning is also seen as a medium for increasing the total number of students who have access to higher education, specifically sidelined ones in rural areas, by being a cheaper and more flexible alternative. This is even more important in a country like India where it is important that the rural students get the benefits of E-learning, thereby increasing the skills of such students. This is specially established by the research of **Kiboss (2000) and Wekesa (2003)** who suggested that E-learning programs help the cognitive and psychomotor abilities of learners, and that students learned the concepts and methods better. It also improves the learners' understanding and problem-

solving abilities as concluded in a study by **Zarabian et al. (2010).** The visual, auditory and movement skills of the sample considerably improved with the techniques of E-learning.

E-learning is an environment-friendly method because it is free from excessive paper usage that exists in conventional classroom-based learning. It reduces environmental emissions as the learners do not need to move for learning and they can learn at their place. **Akasalan(2010)** said that E-learning can save the earth because it lowers the amount of CO_2 produced through on-campus learning. It can prove to be a boon for developing countries like China and India which are facing the threat of environmental pollution.

2.3 E-learning: Limitations and Barriers

Some researchers concluded that even though the enrollment rate in E-learning programmes was high, the limitations of E-learning resulted in even higher drop-out rates in schools and colleges, sometimes much higher than in traditional classrooms **(O'Connor et al, 2003; Romiszowski, 2004; Jordan, 2013 and Levy 2007).** Firstly, the demerit of E-learning is a deficiency of basic facilities for dissemination of E-learning courses. Many developing countries lack the necessary IT infrastructure for E-learning such as computers, electricity and high-speed internet connection. **Kumar et al (2012)** said that the key reason for stress among the majority of students using E-learning was poor access to the technology due to various reasons. In many developing countries, there is a dearth of essential E-learning components, such as computers and electricity; and often there are socio-political factors; human and administrative factors, technical and economic factors with even politics acting as an obstruction to E-learning. **(Heeks, 2002; Rajesh, 2003).**

In another study, **Zhao & Frank (2003)** said that the lack of access to the internet from home was the key barrier in using technology in the teaching process.

Teare (2000) and **Bates (2011)** in their study concluded that students found the delivery of the E-learning course irritating due to technological failures. This means that the problem with E-learning is not in its delivery methods but in the reliability of the technology enabling it.

Limited bandwidth was also mentioned as a concern in the smooth functioning of E-learning courses. It leads to slower performance of the system causing long waits for download specifically for audio and video content which impacts the learning process.

Lack of IT skills among the students were also thought to be a limitation of E-learning. The self-motivation, constant participation and resistance to change from traditional learning are also hampering the growth of E-learning. **(Eastmond, 2000; Sehrt, 2003; Evans, 2005).**

Wilson (2001) in his Economist article said that a lack of IT skills is one of the prime reasons for students abstaining from E-learning courses, despite governments spending millions of dollars. **O'Connell (2002)** says that students face issues in assimilating the course contents in an E-learning environment if they come from a non-technical background. He further states that quieter students will always be excluded from virtual discussions, as there will always be students who will dominate conversations, even online. Therefore, in India, the success of an E-learning course would majorly depend on the IT skills of students, especially when it comes to those from villages or from areas with low digital literacy rates.

Motivation also seems to be a huge factor in students taking up a new technique of learning. **Singh (2005)** in his study deduced that due to lack of motivation, E-learning sometimes appears to be boring. In an E-learning environment, the students may feel isolated since the instructor and the learner are not physically present at the same venue.

However, the same applies for teachers themselves as they also need to be motivated to adopt E-learning techniques and be willing to use it for the progress of their students. The teachers should be willing to go through formal training, attend conferences and seminars to acquire the necessary skills to be an effective E-learning teacher **(Shank, 2002)**.

Without clear vision, support and training, the faculty cannot be dedicated to E-learning. In other words, teachers' use of E-learning environments can be described to a large extent by their perceptions, experiences and the added value of their environments **(Mahdizadeh et al, 2008).** A research by **Rosen & Weil (1995)** has depicted that instructors are unwilling to use computer-based teaching due to a lack of teaching experience with IT and the lack of technical support for teachers.

2.4 E-learning: Factors facilitating adoption of E-learning and E-learning Technology

Zemsky (2007) found out that users' acceptance of the distance learning technology was not the only factor in the adoption of the E-learning system. **Pituch and Lee (2006)** in their study said that E-learning systems should be seen as both easy to use and useful to maximize use of the system and the instructors should demonstrate use of the technology and make available instructional materials that would aid student understanding of the technology. In addition, researchers also suggest that teachers should describe how the technology will benefit students and make them learn course content as students who thought that the system would help them learn showed a greater intent to use the system. **Porter and Donthu(2006)** said that people's experience, personality, and cognitive factors lead to forming a particular belief system about their ability to accomplish a certain thing, and therefore, people would avoid learning something new because of the perceived complexity and risk associated with performing that thing. The researchers concluded that educators who had a positive attitude towards the perceived value of using computers were more likely to embrace the concept of distance learning. **Becker (1999)** found teachers who had student-centered beliefs were more likely to use technology, making it obvious that a faculty or an instructor has a huge influence in adopting E-learning practices.

Users, who believe in a positive use-performance relationship, will help foster the acceptance of technology **(Davis, 1989)**.

Sun et al (2008) in their research found that course content played a key role in E-learning. Course content should always be carefully designed and presented. Technological design plays a key role in students' perceived usefulness and the ease of use of a course and will always have an impact on students' satisfaction.

Tung and Chang (2008) in their study "an empirical investigation of students' behavioral intentions to use the online learning course websites", said that when learners considered E-learning to be useful, they had more chances to accept and learn online. In the same way, the perceived usefulness from an educator's point of view (i.e. greater control over work, improvement in job performance, saving of time, a quicker accomplishment of tasks, and enhancement of effectiveness) may impact their behavioral intention to take up E-learning systems.

2.4.1 Perceived usefulness

Davis (1989) defined perceived ease of use as the extent to which learners or teachers believe that using a certain system would be effortless. From a behavioral decision-making point of view, people quite often try to reduce effort in their behavior **(Igbaria and Iivari, 1995). Venkatesh (2000)** says that users would develop early perceptions of perceived ease of use of a particular system based on their general ideas concerning that system and its usages. **Venkatesh and Morris (2000)** said that perceived ease of use is a function of users' evaluation of the work involved in the process of learning. It is thought that perceived ease-of-use helps in lessening the uncertainty of innovations, leading individuals to adopt the technology in reference **(Elliott and Fu, 2008).**

Porter and Donthu (2006) discoursed that users will avoid learning something new due to the perceived difficulty and risk associated with learning that particular thing. This is especially common with a generation that has minimal access to computers. **Wang et al (2003**) and **Amin (2009)** said that perceived ease of use has a huge effect on behavioral and usage intentions on a new technology. **Ong and Lai (2006)** said that perceived ease of use had a big influence on the behavioral intention of students to use E-learning. The study also found that ladies were more strongly influenced by perceptions of computer self-efficacy and ease of use, and that men's usage decisions were more influenced by their perception of the usefulness of E-learning.

2.4.2. Computer Anxiety & Computer Knowledge

Computer anxiety has been described as the degree of ―an individual's apprehension, or even fear, when she/he is faced with the challenge or possibility of using computers **(Venkatesh, 2000).** He said that computer anxiety would lead users to form negative attitudes towards their behavioral intention to take up the technology.

Research by **Keeler & Anson (1995)**&**Todman and Monaghan (1994)** has depicted that computer anxiety is associated with avoidance and less use of information technology.

On the other hand, **Loyd and Gressard (1984)** say that computer usefulness and computer confidence due to previous knowledge of using computers would lead to forming positive attitudes towards using technology. **Venkatesh and Bala(2008)** say that when an IT system is reliable and flexible, there is a high chance that the people will have less "system-related anxiety", and this is

because of their previous experience. Further, the study says that if the system is user friendly, a user may feel that they have more control over the system, thus enhancing their self-efficacy toward using that technology.

2.4.3 Management/Institutional Support

Management support is described as the extent to which a person 'believes that organizational and technical resources are there to support the use of the system' **(Venkatesh et al, 2003). Venkatesh and Bala(2008)** showed that when users hold a strong belief concerning the availability of organization resources, technical and managerial support, then, that will aid in the adoption of the technology in question.

Research has depicted a notable relationship between management support and the intention to adopt and implement a particular system or technology. Official pressures, which are said to be important for IT adoption and implementation, also contribute toward post-implementation assimilation especially when the integration processes are prolonged and outcomes are dynamic and uncertain. **(Liang et al, 2007).** Research has also shown that management support is one of the most critical factors which contributes to the success of a complicated system **(Chatterjee et al, 2002).**

2.4.4 Normative pressure

According to the Theory of Reasoned Behavior by **Fishbein and Ajzen(1975),** a person's intention to behave in a certain manner is dependent upon the attitude towards performing the behavior in question and also the social pressure on him/her to behave in that manner. This shows that attitudes and subjective norms differ according to the person in question and the behavioral context. Normative pressure can also be described as 'a person's perception that most people who are important to her/him think she/he should or shouldn't perform the behavior in question**.** Normative pressure is relevant to this study because it refers to the degree to which members in society or in an educational setting (teacher on a teacher or teacher on a student) influence others' behavior to enact a particular behavior. Research by **Kleijnen et al. (2004)** and **Hung et al. (2002)** saw support for the relationship between normative pressure and behavioral intention. **Kleijnen et al.**

(2004)said that normative and social pressure had a notable effect on people's intention to use wireless finance. This shows that when there is pressure to use a certain system, people might use it out of desperation. **Chang and Cheung (2001)** opined that normative pressure was important in the intention to use the internet at the workplace and also its voluntary continued use.

2.4.5. Personal Experience

Experience was defined as "an accumulative memory process of all kinds of senses and feelings" **(Oi et al, 2009. p. 394).** People's experience with the use of technology was defined as ―the amount and type of computer skills a person acquires over time **(Smith et al, 1999, p. 227).**

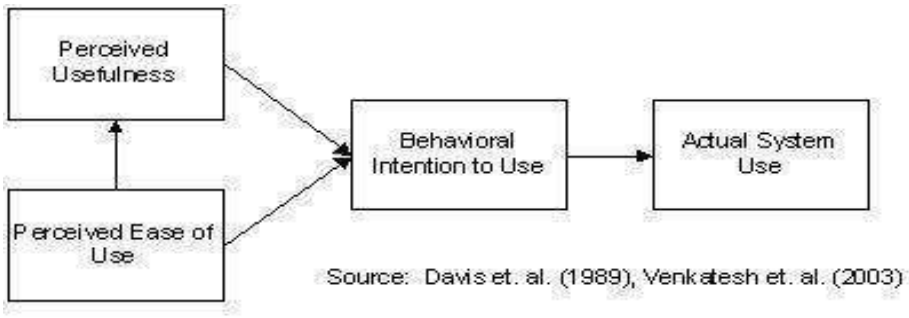
Chin (1998) in his study stated that when a new technology is compatible with users' previous experience, work style, and prevailing work practices, then it is easy to be adopted. Hence, this could explain why experience was among the most significant indicators of behavioral intention in adopting E-learning systems since experience interferes with a lecturers' ability to learn new concepts. **Bhattacherjee and Premkumar (2004)**concluded that people's experience plays a key role in their initial approval of the system in question. These perceptions, however, may get changed with time as users acquire first-hand experience with IT usage, which, in turn, may impact their subsequent IT usage adoption and behaviour.

Previous experience was thought to be a facilitator for the learning process, and hence, making novel technology easy to be adopted. This showed that compatibility with previous experience, reflectinga fit between the target technology and a variety of users' previous encounters with technology can be a facilitator in adopting new technology. **(Karahanna et al. 2006).**

2.4.6.1 Technology Acceptance Model (TAM)

The premise of TAM is that people's behavioral intention to accept and use a certain technology is ascertained by two approaches namely; perceived usefulness and perceived ease of use. User's attitude and belief as proposed by TAM are believed to be an important factor that impacts the use of new technology. People who have positive perceptions toward information technology will show more acceptance of the use of the technology in question, compared to people who have negative perceptions toward that technology. Many empirical pieces of research (**e.g. Davis et al,**

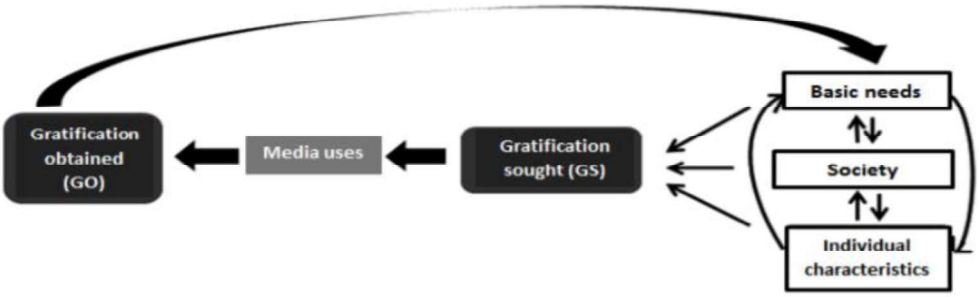
1989; Agarwal &Karahanna& Straub, 1999; Venkatesh et al, 2003, 2007) have been written that have shown support in the favor of TAM.


Perceived Usefulness
Perceived Ease of Use
Behavioral Intention to Use
Actual System Use
Source: Davis et. al. (1989), Venkatesh et. al. (2003)

2.4.6.2 Uses and Gratification Theory

Uses and Gratification Theory is based upon traditional mass communication research on how a specific media is sought and selected to fulfil their needs **(Katz, Blumler, and Gurevitch, 1974).** Such studies, especially those by **Blumber and Kats (1974),** changed the tangent of research from traditional approaches evaluating "What media does to individuals?" to newer approaches deciding "what individuals do to the media?" **(Palmgreen, Wenner, Rosengren, 1985; Drumheller, Babb, De'Armond, 2015).**

The studies of **Blumber and Kats (1974)** are considered to be an evolution in mass communication research and they can be termed as the founders of the UGT. Based on their theory, people communicate to satisfy their needs, which in turn stems from social and psychological states or conditions.



Further research by **Lariscy et al, 2011** says that the basic premise of Uses and Gratifications Theory is that people seek out media that fulfills their needs and which leads to ultimate gratification. Uses and Gratifications Theory has also been quoted extensively within the study of politics and the dissemination of political messages **(Blumler and McQuail, 1969; McLeod and Becker, 1974).** While widely employed in other disciplines, uses and gratifications theory can also find relevance in helping to explain adoption of new technologies and E-learning platforms.

ICTs have not permeated to a huge extent in many higher learning institutions in most developing nations due to many socio-economic and technological factors **(Sife et al, 2007).**

2.6 E-learning: Developing Countries

The Indian education system is structured in such a way that it is more focused on aspects of the global economy. Emphasis is placed on the business applications of technology, laying bare the need to turn graduates into engineers. Chemistry, Physics, and Electronics dominated the Indian curriculum **(Jonathan Ezer, 2006).**

Developing countries such as India are reliant on traditional teaching rather than E-learning for higher education **(Sanyal, 2001).** However, due to its drawbacks, developing countries view the E-learning process as the prospective method to endorse the growth of the economy and its relationship with other countries. However, the developing countries have a huge population, therefore it takes time for technology and development to permeate in all areas.

The benefit of the technology does not reach the people who cannot afford a huge cost for education **(Macleod, 2005).**

The developing countries started to adopt information communication technology by the 1990s with the help of growth of the internet, growth in the global economy as well as digital communications **(Mujahid, 2002).** There is a belief that prevails among these nations that the implementation of E-learning technologies helps in providing a better quality of education **(Hvorecky, 2005).**

The sense of ostracization has been reduced to a large extent with the help of E-learning**(Tinio, 2002)** and also aided digital integration among the developing countries into a global economy that will promote economic growth and fight poverty. **(Macleod, 2005).**

The method that is being followed by these countries is a sort of blended approach which includes different modes **(Thurab, Nkhosi et al, 2005).**

The adoption of E-learning and ICT has ushered many changes among students in aspects like motivation and confidence levels and it has also helped them to increase their technical and communication skills **(Tubaishat et al, 2006).**

With Google and Facebook putting in millions of dollars in the Indian education industry, India is geared towards a global technological evolution. However, several technological and socio-economic factors are hampering the adoption of E-learning in developing countries

(Sife et al, 2001).

There are also other issues stopping the growth of E-learning in India. Socio-economic background also has an effect on computer usability. Socio-economically privileged individuals have less computer anxiety while the socio-economically disadvantaged have a high level of computer anxiety. This was also explained by **Bozionelos (2004)** in his study that "individuals who have been raised within higher social-economic status families are more likely to have a computer available at home, to attend schools with better computer equipment, and to have teachers with better computer skills". This is also explained by the fact that despite the efforts by the Indian government, only 21.3% of learners in rural India have access to computers (ASER study conducted in 2018). Despite the government's relentless efforts to boost the digital revolution, rural India has only 17% penetration, as per a recent study by the Internet and Mobile Association of India & IMRB.

In comparison, India has close to 60% internet penetration in urban areas. According to the 71st NSSO Survey on Education, more than 150 million rural households are not a part of the digital wave, meaning that they still do not even have access to computers, smartphones or the Internet. In the case of India, the major chunk of the population is living in rural areas and so it is a bit difficult to make them aware of the concept or benefits of E-learning.

2.7 E-learning: Impact on Skill-Development

According to a study by **Saba (2012),**E-learning plays a huge role in impacting employable skills on pre-service students thereby making them self-employed.

Use of E-learning also had a positive impact on some aspects of the learners' ability to manage their own learning and use the required information for their academic and professional success. Teachers felt E-learning helped learners become better at creating visual presentations, presenting written work and researching matters. Seven out of ten thought E-learning had made students more effective at reinforcing their knowledge, half felt that students engaged more effectively with the subject in the classroom and nearly half felt that student motivation had increased because of E-learning use. **(Golden et al, 2006).**

According to a research by **Zare (2016)**, E-learning is impactful for knowledge and creativity acquisitions among chemistry students and that greater E-learning opportunities should be provided for larger audiences. This creativity can be used very well for entrepreneurial ventures.

The adoption of E-learning and ICT has brought many changes among students and society in aspects like, motivation and confidence levels, and it also helped them to increase their technical and communication skills **(Tubaishat et al, 2006).**

E-learning can also give rise to entrepreneurship. According to a research by **Thompson et al. (2010)**, E-learning may help develop the skills, creativity, and imagination that are seen as outlining the new economy. Another research by **Marković et al. (2017)** said that E-learning programs especially designed for entrepreneurs can be employed as a tool for empowering young people competencies in this domain and especially in nations with an inadequate system of formal education, such as Serbia.

2.8. E-learning: After COVID-19

The lockdown has brought about unforeseen changes in the E-learning industry. According to a research by **Kapasia et al(2020),** most learners used mobile phones for attending lectures. A notable positive impact of COVID-19 also brought about learning efficiency and performances by adopting online learning strategies **(Gonzalez et al, 2020).**

Still, there were instances of students facing various problems related to depression and anxiety, poor internet connectivity, and/or unfavorable study environment at home. Students from remote areas and marginalized sections of the society faced huge challenges during this pandemic.

The online medium of the teaching-learning process is often discriminatory to poor and marginalized students. It was also observed that hearing-impaired students faced challenges in online learning **(Manzoor, 2020).**

2. 9 Research Gap

Based on the extensive review of literature a significant research gap has been identified. Review of literature suggests there are several research studies available on the topic of E-learning. But they are majorly focused on the role of E-learning and effect of technology in enhancing the education system, to advance the education, networking of universities to modernize and ease the education procedure and administration, and providing flexible and multiple programs to the learners at their convenience.

However, even with extensive review of literature, the researcher has been unable to find verified and conclusive data pertaining to the role and impact of E-learning on Skill development. No such data is available which pertains to the sample: University Media students of Uttarakhand state and their skill development as a result of adoption of E-Learning.

The study will be conducted to bridge the identified research gap.

Chapter 3
RESEARCH METHODOLOGY

3.1. Research Design

The present study will adopt an exploratory cum descriptive research design. The research design will be used to specify the overall research plan, structure, methods and procedures for collecting and analyzing the data for fulfilling the requirements of the research objectives and completing the study successfully.

3.2. Research Method

To carry out this research study, a mixed method approach will be used in this study. Both qualitative and quantitative methods will be used for data collection.

3.3. Data Collection Tools

To fulfill the need of research objectives, the **primary data as well as secondary data** will be used for this research study.

Primary Data will be collected through a structured questionnaire and personal in-depth interviews by the researcher. The qualitative data in this study will be obtained through in-depth interviews of experts from both academia and industry. The quantitative data will be obtained through a survey method from the sample selected for the study.

Secondary data will be collected from various sources such as books, academic journals, magazines, newspapers, research studies, government publications, official reports, online libraries, Organizational/ Institutional websites, etc.

3.4 Sample Design & Sampling Procedures

All Undergraduate and Postgraduate Media students of Universities and their affiliated colleges and media institutes in Uttarakhand will be considered as the **population** for this research study. This sample has been selected in accordance with the specification of degrees awarded by University Grants Commission, 2014 Gazette declaration i.e. Bachelor of Journalism, Master of Journalism, Bachelor of Arts (Journalism), Masters of Arts (Journalism), BA (Journalism & Mass Communication), MA (Journalism & Mass Communication), BA (Multimedia), BSc (Multimedia) and MA (Mass Communication).

3.4.1 Sample Size

Sample size for qualitative study: 15

- 5 academicians will be selected from Media Studies.
- 5 experts will be selected from the E-learning industry.
- 5 Media practitioners will be selected from the Media Industry.

Sample size for quantitative study: 300

- 300 Media students from Universities and affiliated colleges and institutes of Uttarakhand will be selected as respondents for the study.

3.4.2 Sampling Method

- For this research study, Simple Random Sampling will be used to select the respondents for the quantitative study.
- Purposive Sampling will be used to select the experts from academia and the E-learning industry.

3.4.3 Data Analysis

For the Qualitative research, Content analysis of the data collected from the in-depth interviews of experts will be undertaken to get the required results.

For Quantitative research, the data will be collected through the use of questionnaires and the data will be tested using statistical tools like SPSS 26.0.

3.5 Limitations of the Study

Following are the limitations of the study:

1. The present study will be limited to the state of Uttarakhand.
2. The study will be confined to media students, with reference to university education only.
3. Being an individual research study and few constraints in terms of time, efforts, money and resources, the study will employ limited respondents for conducting in-depth interviews.

4. TENTATIVE CHAPTER SCHEME

The research study will comprise the following chapters:

Chapter 1. Introduction

Chapter 2.Review of Literature

Chapter 3.Research Methodology

Chapter 4. Data Analysis

Chapter 5. Findings & Discussion

Chapter 6. Conclusion, Recommendation and Future Scope

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Appendix

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